BERTHOUD

Spraying specialist since 1895

SPRAYERS CATALOGUE N°11

Plantcare | Weeding | DIY | Green Space | Hygiene livestock and dairy farming

www.berthoud.fr

MADE IN FRANCE

SPRAYING SPECIALISTS SINCE 1895

1895 Company founded by Paul Berthoud who wanted to industrialize the production of copper knapsack sprayers.

1938 The second generation Ferdinand and Jean Berthoud, his two sons, joined the company in turn.

1956 Arrival of the third generation with cousins Guy and Didier whose priority is to attack the home market with a specific range «Flori-Leisure».

1969 Centralization of all services (production, sales, despatch) in Villefranche-sur-Saône (France)

1987 The company is taken over by Patrick Ballu and joins EXEL Industries, world leader in spraying.

Berthoud becomes one of the strongest brands at EXEL GSA holding for many years almost 40% of the French market (in value), an undisputed leader.

Berthoud products are recognised as being highly professional. This is in part due to their agricultural origins and their long term market presence. It will come as no surprise that the company's core clients are the experienced gardener and the professional. The company meets its customers' exacting requirements in three ways:

- by offering an unrivalled breadth or product range
- by offering impeccably engineered, high-performance sprayers
- by offering excellent after-sales service

The Berthoud brand marketed by EXEL GSA is which certified ISO 9001 2008 version in recognition of its high design, manufacturing and the selling of sprayers.

Moreover, many new products have been awarded the trophy for innovation such as the ELYTE and VERMOREL ranges and more recently the GREEN POWER electric weeder in 2012.

BERTHOUD over 115 years of history.

For more information visit our website

www.berthoud.fr

CONTENTS

BERTHOUD p2

ELECTRIC WEEDER
- Green Power p6

HAND SPRAYERS
- F1, F2, Spirovit p8

COMPRESSION SPRAYERS
- Floraly "Optima" p10
- Elyte "Pro" p13

CONSTANT PRESSURE SPRAYERS
- Cosmos 18 Pro p16

TROMBONE SPRAYER
- Alto, Seringa p17

CONSTANT PRESSURE SPRAYERS
- Vermorel 1800 / 2000 p18
- Vermorel Electric p21

MAINTENANCE ACCESSORIES / SPARE PARTS
for compression and backpack sprayers p22

ELECTRIC AND I/C SPRAYERS
- Pulvexel p29
- Accessories p34

ATOMISERS
- Boostair p33
- Accessories p34

LOCALIZED CLEANING AND DISINFECTION
- Mam' spray, Tecnomite p36
- Soaking cup p36
- Foam trigger sprayer p36
- F2 Hygiene p36

ANIMAL VACCINATION
- C5 / 1 L p37
- Mist Blower p37

CLEANING AND DISINFECTING FARM BUILDINGS
- Elyte 8 Stainless Steel Lance p38
- Vermorel 2000 Hygiene p38
- Disinfection Unit 120 p39
- Master 9 / Master 13 p39

TIPS FROM THE PRO

Follow the example of **Jean Yves Sonnery, Domaine de Baluce**, BAGNOLS (Rhône) and use **BERTHOUD** sprayers !

Jean-Yves Sonnery's vineyard lies on the south slopes of Beaujolais in BAGNOLS (Rhône). He is committed to using traditional, environmentally friendly working methods to produce authentic, distinctive wines.

He is regularly praised by his peers for his excellent work and the quality of his wines. He has won many awards at the Paris Agricultural Show, the Great French Wine competitions in Mâcon and the St Vincent competition, Mâcon and was also awarded the International Oenology Trophy. His wines are also featured every year in the Hachette guide since 2004.

Jean-Yves Sonnery trusts BERTHOUD sprayers to treat his vines. You will find his **Tips** throughout the catalogue on how to treat effectively, saving chemicals and preserving the environment.

Jean-Yves Sonnery - Domaine de Baluce, 69620 BAGNOLS,
tel : +33 (0)4.74.71.71.43 - ***www.baluce.fr***

A WIDE AND VARIED RANGE

GREEN POWER electric weeder

Use in organic agriculture, it enables easy weeding of small areas without chemicals, thanks to its thermal shock (600 ° C) which destroys the cells to eliminate weeds.

Constant pressure sprayers

Perfectly adapted for the requirements of keen and professional gardeners (large capacity, carried on your back so more practical and more comfortable, constant pressure etc).

Trigger sprayers

Lightweight and easy to use, they are perfectly adapted for the treatment of household plants and all other domestic applications (spraying linen, cleaning windows etc).

Electric powered sprayers with rechargeable battery

No need to pump manually providing constant pressure and of having a large working autonomy (one day's work)

Small hand compression sprayers

Also easy to use, they are perfectly adapted for balcony and terrace plants. Available in specific versions for localized weed control (with extension and mini-shield) and also for DIY (with resistant seals).

Trolley sprayers

Large capacity sprayers, these are for professionals in charge of the upkeep of parkland (tall trees, treatment of large surface areas, etc).

Compression sprayers

This type of sprayer is particularly useful for amateur and keen gardeners. Available in 3 effective capacities: 3-litre, 5-litre and 8-litre, to be able to adapt to various garden dimensions. 2 ranges available in FLORALY «Optima» and ELYTE «Pro»

Mist blowers

Essential for professionals for all treatments either at tall heights or for large surface areas, notably when these are on a slope, which prevents access for large equipment.

A clear segmentation of sprayers according to their uses

Plant care :
adapted for all insecticide and fungicide treatments

Weeding :
specially equipped for weeding (protective cover, nozzles…)

DIY :
resistant to aggressive treatments appropriate for home maintenance (Viton seals)

Green spaces :
designed for large areas

Quality products for reliable and efficient sprayers

Sprayers manufactured in France

All our sprayers are manufactured in our factory in France. The quality of the components and their assembly, the rigourous monitoring at all stages of manufacturing and the systematic tracking are all measures to ensure high quality, durable and reliable products.

A priority : Quality

The company is certified ISO 9001 version 2008, a guarantee of quality procedures at each stage of the design, manufacture and distribution of our sprayers.

Durable products

Berthoud guarantees their manual knapsack sprayers and over 2L compression sprayers for 5 years (under the conditions specified in the equipment's user manual for products sold since September 1st 2007).

An impeccable after sales service

All our products are repairable thanks to our After Sales Service which guarantees the availability of spare parts for at least 10 years after the end of the products commercialization.

An aid to effective sales at different levels

Attractive and informative packaging

Through its readable and attractive packaging range (equipment and accessories), Berthoud asserts its professionalism and high-end positionning.

Specific guides to increase awareness

Spare parts catalogue for the quick identification of the parts required.

Sprayer training book, practical guide on insecticide and fungicide treatments, «After sales training» module.

POS advertising and information

To dress-up the shelves: brand banner signs, «Product benefits» markers for the larger ranges ELYTE, VERMOREL and ACCESSORIES.

Spare parts service case

3D Spare parts

GREEN POWER

NEW 2012 NEW

BERTHOUD'S INNOVATION
among thermal weeders

A real alternative to chemical products the Berthoud electric weeder helps to maintain driveways, courtyards, flower beds, vegetable patches…

Easy to use, the Green Power creates a thermal shock (600°C) which breaks the plant cells thus destroying the weeds.

Usable in organic agriculture.

ADVANTAGES OVER GAS WEEDERS

- **ECONOMIC :** 0.22 euros for 1 hour of use is 10 times cheaper than a gas weeder
- **ECOLOGICAL :** no consumables, no CO_2 emissions
- **SAFE :** no flames, no connection manipulation, no gas

SIMPLE AND PRACTICAL

- Simply plug into an extension cord
- Always ready for use
  - No consumables required
  - Doesn't need to be charged
  - No maintenance required

EFFICIENT AND ECONOMICAL

- Efficient and precise (destroy weeds without affecting the plants nearby)
- Low energy consumption and inexpensive

SAFE

- No flames, no risk of leakage or reversal
- Cooling down phase upon shutdown to prevent burns

ELECTRIC WEEDER

GREEN POWER

NO WASTE · NO PESTICIDES

Ergonomic handle

Length and weight (1.1kg) designed to remove weeds without bending down or getting tired

On/Off switch and ventilation mode for cooling

Patented

Heating module : 1 600 W power

Product storage hook

Spray shield to be placed on the unwanted plant

Article Name	Reference	EAN code	Item weight (kg)	Box			Pallet		
				N° Units	Dimensions W x D x H (mm)	Gross Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
Green Power	101137	3176241011376	1,10	2	1080 x 210 x 160	3,20	1200 x 800 x 2230	13	3
Box Green Power	101138	3176241011383	1,10	9	600 x 400 x 1100	15,50	1200 x 800 x 1250	1	4

F1 / SPIROVIT F2

Handhelds are lightweight, small and primarily designed for the treatment of indoor and outdoor plants but come in just as handy for such household chores as dampening the laundry prior to ironing,window cleaning, or dousing pets with insecticide.

TRIGGER SPRAYERS

F1 - Gardening DIY

101135

For the house, the garden and for DIY

- Polyethylene reservoir with graduated gauge: capacity 1 L
- Watertight neck
- Swirl nozzle with adjustable and sealable jet
- Large base for good stability (even when empty)
- Sealable nozzle that can be locked ("child safe")
- Full-grip trigger

TIP N°1

"Never spray in very hot weather."
"Avoid spraying between 10.00 AM and 6.00 PM. The best time for spraying is in the eveningafter 8.00 PM or early in the morning when the plants open and breathe."

F1 PLUS

101210

With 'full opening' for the garden

- Polyethylene reservoir with graduated gauge capacity: 1 L
- Cylindrical shape with 'full opening' (screw top)
- 'XL' high-performance sprayer head
- Swirl nozzle with adjustable jet

SPIROVIT

101088

For banks of plants, balconies, terraces and small gardens

- Large-capacity polyethylene reservoir with graduated gauge: 5 L
- Bandoleer shoulder strap
- Length of hose: 1.5 m
- High-performance 'CANYON' sprayer head
- Nozzle with adjustable and sealable jet

F2 PLUS - Plant care

101223

Balconies, terraces and small gardens

- Reservoir: yellow blow moulded polyethylene
- Total capacity: 2 L
  Usable capacity: 1.5 L
- Manual pressure pump with integrated safety valve
- Ergonomic handle
- Nozzle with adjustable jet and brass insert

F2 PLUS - DIY

101218

For the house and DIY

- Reservoir : yellow blow moulded polyethylene
- Total capacity: 2 L
  Usable capacity: 1.5 L
- Manual pressure pump with integrated safety valve and UHR (Ultra-High Resistance) seals
- Ergonomic handle
- Nozzle with adjustable jet and polyamide insert

F2 PLUS - Weeding

101123

For localised weed control

- Reservoir: yellow blow moulded polyethylene
- Total capacity: 2 L, usable capacity: 1,5 L
- Manual pressure pump with integrated safety valve
- Ergonomic handle

Specific weed control equipment :

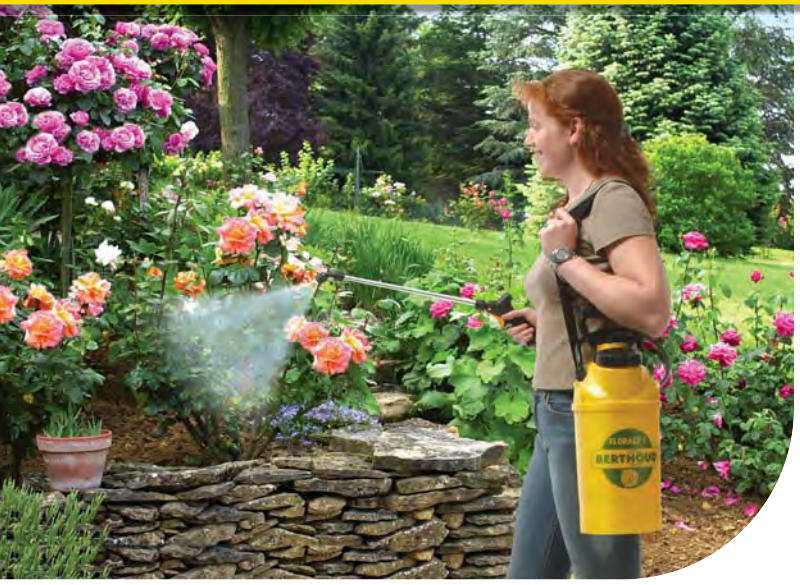
- 1 lance extension with curved nozzle holder, total length: 30 cm
- 1 mini-weed control shield with swirl nozzle with 12/10 plate

TIP N°2

"Small sprayers can be used for spot treatment of individual plants. Using several sprayers avoids mixing products, in particular mixing weed killers with pesticides/ fungicides."

Article Name	Reference	EAN code	Item weight (kg)	Box			Pallet		
				N° Units	Dimensions W x D x H (mm)	Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
F1 Gardening DIY	101135	3176241011352	0,12	28	800 x 400 x 250	4,34	1200 x 800 x 2150	8	3
F1 Plus	101210	3176241012106	0,22	12	710 x 320 x 330	3,10	1200 x 800 x 1800	5	4
Spirovit	101088	3176241010881	0,51	11	460 x 810 x 470	0,72	1200 x 800 x 2030	4	2
F2 Plus	101223	3176241012236	0,46	6	400 x 300 x 300	3,08	1200 x 800 x 1950	6	8
F2 Plus Weeding	101123	3176241011239	0,52	6	180 x 660 x 460	3,72	1200 x 800 x 1990	4	7
F2 Plus DIY	101218	3176241012182	0,46	6	400 x 300 x 300	3,08	1200 x 800 x 1950	6	8

FLORALY "OPTIMA"



Sprayers that are **EASY** to use to maintain small and medium sized gardens

Berthoud's extensive experience, the Floraly Optima range represents the best value for money in the market. This new range is characterised by innovations which bring numerous improvements in terms of ease of use, safety and comfort. The range is available in 3 formats: 3-litre, 5-litre and 8-litre, usable capacities, and also comes in a 'DIY' version with resistant seals. The FLORALY Optima range, combined with the BERTHOUD range of accessories, allows all requirements to be met in both the field of «plant protection» and DIY.

Professional nozzle with integrated nut Practical to use and easy to change
Polypropylene pump handle and rod
High-resistance braided hose 8 x 12
Hose nozzle with swing-joint connection
Adjustable carrying strap Quick-fastening clips
External gauge graduated in litres and US gallons
Translucent tank in resistant injected polypropylene
Fixed pressure pump for user's safety and high mechanical resistance
Multi-purpose nozzle holder with adjustable jet and integrated swirl plate
Aluminium lance with storage clip
Cap with integrated measurer Easy and precise dosage (2, 3, 4, 5, 10, 20 and 40 ml)
Safety valve with maximum pressure level indicator (3 bars) and sprayer decompressio
Large-diameter filling hole (80 mm)
Professional lance handle in ribbed polypropylene with high mechanical resistance Integrated filter

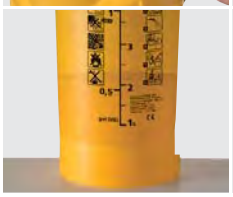
FLORALY OPTIMA :

Technical characteristics and advantages for the user

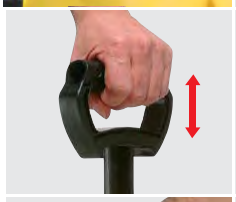
FOR EASIER USE

	Characteristics	Advantages for the user
	Wide opening separate from the pump	Easier filling, mixing and emptying
	Shape of head without retention zone on emptying	Easy, total and quick emptying
	Cap with integrated measurer (7 dosage possibilities: 2, 3, 4, 5,10, 20 and 40 ml)	Easy and precise dosage
	Shoulder strap fastening with simple clips	Shoulder straps quick and easy to fasten
	Slide rail for easy storage of the lance	Easy to store lance Simplified storage
	New professional nozzle with integrated nut	Practical to use, easy to change

FOR GREATED USE

	Characteristics	Advantages for the user
	Fixed and off centre pump	User safety: no need to remove the pump for filling and emptying
	Safety valve with maximum pressure level indicator (< 3 bars) and sprayer decompression	No risk of excess pressure on pumping. Quick and easy decompression of the equipement
	Large diameter translucent reservoir with graduated gauge	Liquid level visible Excellent stability on the ground

FOR EXCELLENT COMFORT

	Characteristics	Advantages for the user
	Hose outlet mounted on rotating connector	Easier handling of the hose/lance unit
	New wide pump handle	Ergonomic and robust pump handle
	Professional lance handle with twofinger trigger and integrated filter	Ensures a natural position for the wrist and the hand

FLORALY 5 OPTIMA
Plant care
101450

For small gardens : < 300 m²

- Total tank capacity: 5.2 L, usable capacity: 3 L
- Fixed and off-centre manual pressure pump with nitrile seals
- 3 bar safety value
- Wide opening on reservoir separate from the pump (diameter: 80 mm)
- Multi-compartment measuring cap: 7 dosage possibilities (2, 3, 4, 5, 10, 20 and 40 ml)
- Nozzle outlet mounted on a swing-joint connection
- Adjustable carrying strap with quick-fastening clip system
- Professional PROFILE-type lance handle
- Hose length: 1 m
- 40 cm aluminium lance
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional swirl nozzle for conical jet

FLORALY 7 OPTIMA
Plant care
101451

Medium-sized gardens : 200 to 700 m²

- Total tank capacity: 7.2 L, usable capacity: 5 L
- Fixed and off-centre manual pressure pump with nitrile seals
- 3 bar safety value
- Wide opening on reservoir separate from the pump (diameter: 80 mm)
- Multi-compartment measuring cap: 7 dosage possibilities (2, 3, 4, 5, 10, 20 and 40 ml)
- Nozzle outlet mounted on a swingjoint connection
- Adjustable carrying strap with quick-fastening clip system
- Professional PROFILE-type lance handle.
- Hose length: 1 m
- 40 cm aluminium lance
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional swirl nozzle for conical jet

FLORALY 7 OPTIMA
DIY
101452

For treatment of wood and framework, shutters, moss control of roofs and paths etc.

- Total tank capacity: 7.2 L, usable capacity: 5 L
- Fixed and off-centremanual pressure pump with seals that are resistant to hydrocarbon based solvents
- 3 bar safety value
- Wide opening on reservoir separate from the pump (diameter: 80mm)
- Multi-compartmentmeasuring cap: 7dosage possibilities (2, 3, 4, 5, 10, 20 and 40ml)
- Nozzle outletmounted on a swing-joint connection
- Adjustable carrying strap with quick-fastening clip system
- Professional PROFILE-type lance handle with resistant seals
- Hose length: 1m
- 40 cm composite lance with flexible end socket
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional flat fan nozzle

FLORALY 12 OPTIMA
Plant care
101453

For large gardens : > 500 m²

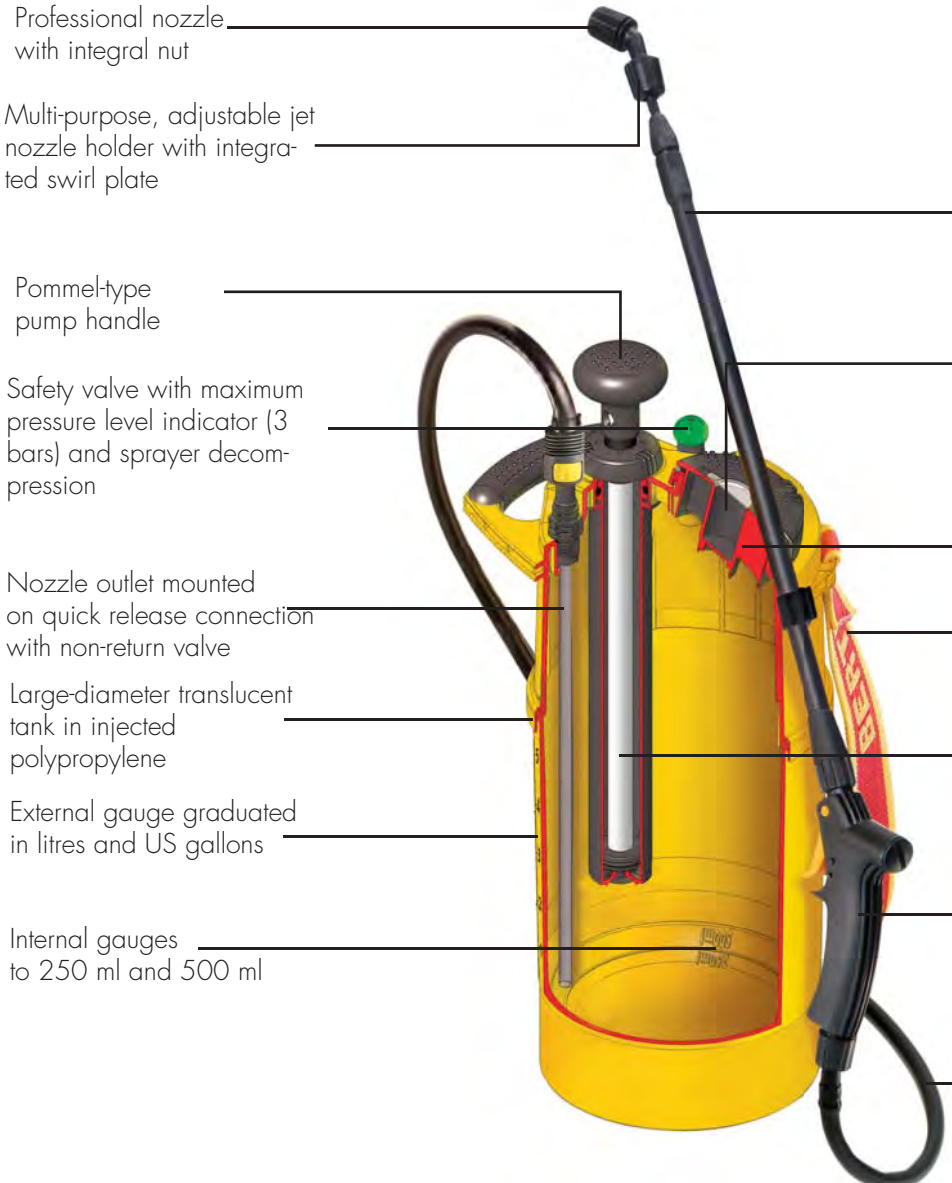
- Total tank capacity: 11.5L, usable capacity: 8 L
- Fixed and off-centre manual pressure pump with nitrile seals
- 3 bar safety value
- Wide opening on reservoir separate from the pump (diameter: 80 mm)
- Multi-compartment measuring cap: 7 dosage possibilities (2, 3, 4, 5,10, 20 and 40 ml)
- Nozzle outlet mounted on a swingjoint connection
- Adjustable carrying strap with quick-fastening clip system
- Professional PROFILE-type lance handle
- Hose length: 1.35 m
- 60 cm aluminium lance
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional swirl nozzle for conical jet

Article Name	Reference	EAN code	Item weight (kg)	Box			Pallet		
				N° Units	Dimensions W x D x H (mm)	Gross Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
F5 Optima	101450	3176241014506	1,44	1	200 x 195 x 430	1,64	1200 x 800 x 2300	4	24 (+9)
F7 Optima	101451	3176241014513	1,55	1	200 x 195 x 520	1,82	1200 x 800 x 2230	4	24
F7 Optima DIY	101452	3176241014520	1,58	1	200 x 195 x 520	1,85	1200 x 800 x 2230	4	24
F12 Optima	101453	3176241014537	2,08	1	200 x 195 x 685	2,43	1200 x 800 x 2205	3	24

ELYTE "PRO"

THE MOST ADVANCED compression sprayers ON THE MARKET

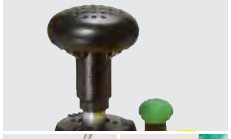
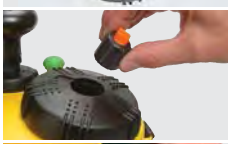
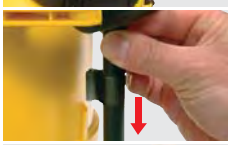
Although the latest consumer studies classed the ELYTE N°1 range well ahead of all its competitors, the range is being developed further to become by far the most advanced on the market.
It is being improved in all aspects: ease of use, comfort and usable capacity. It is still available in two formats (6 L and 8 L). Gardeners and DIY fans will be happy to know that it comes in three versions: 'Plant care', 'weeding' and 'DIY'.


Professional nozzle with integral nut
Multi-purpose, adjustable jet nozzle holder with integrated swirl plate
Pommel-type pump handle
Safety valve with maximum pressure level indicator (3 bars) and sprayer decompression
Nozzle outlet mounted on quick release connection with non-return valve
Large-diameter translucent tank in injected polypropylene
External gauge graduated in litres and US gallons
Internal gauges to 250 ml and 500 ml
Composite, telescopic lance tube, length 50/100 cm with storage clip
Cap with integrated measurer (7 dosage possibilities: 2, 3, 4, 5, 10, 20 and 40 ml) and storage trap for nozzle
Large-diameter filling hole (80 mm)
Carrying strap, width 40 mm (adjustable)
Fixed pressure pump with high mechanical resistance
Professional lance handle in ribbed polypropylene with high mechanical resistance Integrated filter
High-resistance braided hose 8 x 12

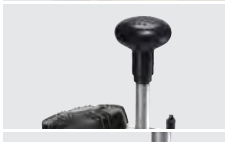
ELYTE PRO :

Technical characteristics and advantages for the user

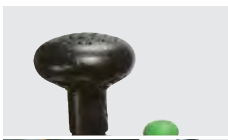
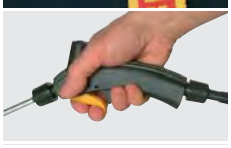
FOR EASIER USE

	Characteristics	Advantages for the user
	Specific ELYTE pump	Unbeatable operational ease and comfort
	Wide opening separate from the pump	Easier filling, mixing and emptying
	Multi-purpose side handle	Very useful for each operational phase (pressurization, use, emptying rinsing/ cleaning, torage)
	Shape of head without retention zone on emptying	Quick, total and easy emptying
	Cap with integrated measurer (7 dosage possibilities: 2, 3, 4, 5, 10, 20 and 40 ml)	Easy and precise dosage
	Cap with storage trap for nozzles	Nozzles always to hand. No more risk of losing them
	Slide rail for easy storage of the lance	Easy storage of the lance Simplified storage
	New professional nozzle with integrated nut	Practical to use, easy to change
	Quick release hose connection	Easier transport and storage
	Translucent reservoir	Visible liquid level
	Composite telescopic lance	For treatment as near as possible to the target area

FOR GREATED USE

	Characteristics	Advantages for the user
	Fixed, offcentre pump	User safety: no more need to take it off for filling and emptying
	Metal pump rod	Excellent perceived quality and robustness
	New valve with maximum pressure level indicator (< 3 bars) and sprayer decompression	No risk of excess pressure on pumping. Quick and easy decompression of the equipement.
	Large diameter cylindrical reservoir with graduated gauge	Higher effective usable capacity: 6 litres (instead of 5 litres). Excellent stability on the ground

FOR INCREASED COMFORT

	Characteristics	Advantages for the user
	Pommel-type pump handle	Comfortable to pump and aesthetic
	Quick release connector	Easier to handle the hose/pump unit
	Wide adjustable shoulder trap	Comfortable to carry
	Professional, ergonomic,PROFILE-type lance handle and integrated filter	Ensures a natural wrist and hand position

ELYTE 8 PRO
Plant care

101001

For average and large sized gardens:
200 to 1200 m²

- Total reservoir capacity: 8.5 L, usable capacity: 6 L
- 3 bar safety value
- Fixed and off-centre manual pressure pump
- Aluminium pump rod
- Wide opening on reservoir separate from pump (diameter: 80 mm)
- Cap with multi-compartment measurer (7 dosage possibilities) and storage trap for nozzles
- Quick release connector for the hose
- Adjustable carrying strap
- Braided hose 8 x 12 length 1.35 m
- Professional PROFILE-type lance handle
- 0.5 / 1m strong and chemically resistant composite telescopic lance
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional swirl nozzle with conical jet

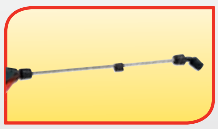
ELYTE 8 PRO
Weeding

101002

For average and large sized gardens:
200 to 1200 m²

- Total reservoir capacity: 8.5L, usable capacity: 6 litres
- 3 bar safety value
- Fixed and off-centre manual pressure pump.
- Aluminium pump rod
- Wide opening on reservoir separate from pump (diameter: 80 mm)
- Cap with multi-compartment measurer (7 dosage possibilities) and storage trap for nozzles
- Quick release connector for the hose
- Adjustable carrying strap
- Braided hose 8 x 12 length 1.35 m
- Professional PROFILE-type lance handle
- 60 cm strong and chemically resistant composite lance
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional flat-jet nozzle

ELYTE 8 PRO EXPORT — 101007
ELYTE 14 PRO EXPORT — 101014



Brass lance

+

Fixed connection

ELYTE 14 PRO
Plant care

101004

For large gardens :
> 500 m²

- Total reservoir capacity: 13.75 L, usable capacity: 8 L
- 3 bar safety value
- Fixed and off-centre manual pressure pump
- Aluminium pump rod
- Wide opening on reservoir separate from pump (diameter: 80 mm)
- Cap with multi-compartment measurer (7 dosage possibilities) and storage trap for nozzles
- Quick release connector for hose
- Adjustable carrying strap
- Braided hose 8 x 12 mm length 1.35 m
- Professional PROFILE-type lance handle
- 0.5 / 1m strong and chemically resistant composite telescopic lance
- Multi-purpose, adjustable nozzle holder with integrated swirl plate
- Delivered with professional swirl nozzle with conical jet

ELYTE 8 PRO
DIY

101003

For treatment of wood and framework, shutters, moss control of roofs and paths etc

- Total reservoir capacity: 8.5 L, usable capacity: 6 L
- 3 bar safety value
- Fixed, off-centre manual pressure pump with UHR (Ultra-High Resistance) seals
- Brass pump rod
- Wide opening on reservoir separate from pump (diameter: 80 mm)
- Cap with multi-compartment measurer (7 dosage possibilities) and storage trap for nozzles
- Quick release connector for hose
- Adjustable carrying strap
- Braided hose 8 x 12 mm length 1.35 m
- Professional PROFILE-type lance handle
- 60 cm strong and chemically resistant composite lance with flexible tip
- Multi-purpose, adjustable nozzle holder with integrated brush-type swirl plate
- Delivered with professional flat fan nozzle

Article Name	Reference	EAN code	Item weight (kg)	Box			Pallet		
				N° Units	Dimensions W x D x H (mm)	Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
Elyte 8 Pro	101001	3176241010010	1,81	1	250 x 195 x 520	2,09	1200 x 800 x 2230	4	19
Elyte 8 Pro Weeding	101002	3176241010027	1,87	1	250 x 195 x 605	2,20	1200 x 800 x 1965	3	19
Elyte 8 Pro DIY	101003	3176241010034	1,84	1	250 x 195 x 520	2,12	1200 x 800 x 2230	4	19
Elyte 14 Pro	101004	3176241010041	2,31	1	250 x 195 x 685	2,66	1200 x 800 x 2205	3	19
Elyte 8 Pro Export	101007	3176241010072	1,86	1	245 x 195 x 510	2,20	1200 x 800 x 2190	4	19
Elyte 14 Pro Export	101014	3176241010140	2,26	1	245 x 195 x 750	2,68	1200 x 800 x 2520	3	19

COSMOS 18 PRO

COMFORT and PERFORMANCE

A popular product for professional sprayers, the BERTHOUD brand has launched the new generation of COSMOS 18. Since the old COSMOS 18 PRO is very reliable only the comfort angle has been redesigned to improve user working conditions.

PERFORMANCE

- High performance pump up to 6 bars pressure
- Product mixer integrated into the pump to homogenize the mixture

EASE OF USE

- Large diameter filler opening
- Sloping tank base prevents residual liquid at the end of the treatment
- Translucent graduated tank
- Easy to assemble and maintain
- Large volume anti-splash filter for quick filling

COMFORT

- Carrying handle for easy transport
- Lance holder for easy storage
- Equipment well adjusted for the back
- Reversible left/right pump lever
- Pump with less effort
- Natural position of the wrist and hand using the Profile handle

TIP N°3

"Adjust the dose to the severity of the disease. Take preventive action but keep an eye on the disease and how it spreads. You have to know when to leave it alone and when to act."

ALTO

101127

For all treatment at heights

- "Double action" syringe sprayer operating two directions
- Yellow, translucent, polyethylene reservoir with graduated gauge, capacity : 10 L
- Adjustable shoulder straps
- Wide opening with filter for filling
- Double action, chrome plated brass pump
- High operating pressure (4-5 bars depending on the pumping rate)
- Adjustable jet nozzle

SERINGA

101025

For working at heights

- "Double action" syringe sprayer operating two directions
- 2 multi-purpose multi-directional nozzles (swirl and flat fan)
- 10 m hose
- High operating pressure (4-5 bars depending on the pumping rate)
- Can be connected to a sprayer hose to use the tank as a reservoir
- 60 cm lance extension to treat areas that are difficult to reach
- Viton® seal to withstand hydrocarbons and solvents
- Clip to prevent the hose coming out of the container
- Strainer to filter liquids to avoid clogging the nozzle

COSMOS 18 PRO

102215

Ideal for larger gardens, orchards,vineyards etc

- 125 mm diameter filler opening
- The bottom of the tank slopes
- Carry handle
- Lance holder for easy storage
- More comfortable to use and the sprayer fits well on the back
- Translucent, graded 18 litre tank
- Manual pressure pump 6 bars
- Reversible left / right pump lever
- High performance hand pump with chemical resistant seals
- User friendly, heavy duty handle for precise spraying 60 cm aluminium lance
- Universal nozzle holder

COSMOS 18 PRO EXPORT

102216

Composite lance + Repair kit

Article Name	Reference	EAN code	Item weight (kg)	Box			Pallet		
				N° Units	Dimensions W x D x H (mm)	Gross Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
Alto	101127	3176241011277	1,12	1	265 x 175 x 535	1,47	1200 x 800 x 2075	11	6
Seringa	101025	3176241010256	0,95	1	165 x 60 x 610	1,23	1200 x 800 x 1950	9	16
Cosmos 18 Pro	102215	3176241022150	3,72	1	450 x 170 x 505	4,15	1200 x 800 x 2170	4	11
Cosmos 18 Pro Export	102216	3176241022167	3,70	1	400 x 170 x 505	4,13	1200 x 800 x 2170	4	14

VERMOREL

A UNIQUE CONCEPT

A renowned name amongst professionals thanks to 3 major assets :

- Exceptional carrying comfort **new safety harness**
- **High performance** diaphragm and curvilinear piston pump
- **A level of features never seen** before (notably for the Vermorel 2000 Pro Comfort)

PERFORMANCE

- Diaphragm pump for quick pressurization and low pumping frequency
- Viton seals for use with agressive products
- Up to 5 bars pressure

PRECISION

- Fine drops, adjustable nozzle holder
- Pressure regulator for treating at the right pressure (from 1 to 5 bars)
- 1.2m telescopic lance to treat closer to the target
- 3 nozzle kit in function of the treatment required

EASY TO MAINTAIN

- Quick and easy to disassemble

TIP N°4

"Apply weed killer in autumn when the sap is returning to the roots. Treatment is more effective and you use less weed killer."

NEW SAFETY HARNESS
ON THE VERMOREL 2000 MODELS

NEW 2013 NEW

- 1 year of studies and tests to determine the impact of wearing the sprayer on the user's back, with the hospital center of Villefranche-sur-Saône (Rhône, France)
- Development of a new carrying system that preserves the back to work longer and better!
  - Reduce negative impacts on the spine and pelvis
  - Significant reduction in arduousness caused by the sprayer

Reinforced back support
- No direct contact with the tank for improved comfort

Adjustable straps with reinforced foam and tensioners
- Adjusts to the user's morphology
- Protects the user's shoulders

Chest strap
- Ensures sprayer stability
- Alleviates lateral tension

Adjustable waist strap and reinforced back
- Sprayer weight distribution : 70% on the hips / 30% on the shoulders
- Ensures sprayer stability

VERMOREL 1800

102084

For large gardens, orchards, trees and shrubs etc

- Reservoir: capacity: 16 L with visible liquid level
- Ergonomic back frame, which perfectly fits the shape of your back
- Adjustable double shoulder straps
- Reversible left/right pump lever with 2 positions: storage (Greenical position) and in operation (inclined position)
- High-performance diaphragm pump with curved piston (ease of handling and low pumping rate)
- Professional 'PROFILE'-type lance handle (comfort and accuracy)
- 60 cm composite lance with high mechanical and chemical resistance
- Multi-purpose adjustable nozzle holder
- Delivered with swirl nozzle and 15/10 plate

VERMOREL 2000 PRO CONFORT

Weeding

102078

For large gardens, orchards, trees and shrubs etc

- Reservoir: capacity: 16 L with visible liquid level
- Ergonomic back frame, which perfectly fits the shape of your back
- Reversible left/right pump lever with 2 positions: storage (greenical position) and in operation (inclined position)
- High-performance diaphragm pump with curved piston (ease of handling and low pumping rate)
- Professional 'PROFILE'-type lance handle (comfort and accuracy)
- 60 cm / 120 cm telescopic composite lance with high mechanical and chemical resistance
- Multi-purpose adjustable nozzle holder
- Delivered with the following equipment: 1 multi-purpose, adjustable nozzle holder equipped with original 1 bar antidrip pressure regulator with an anvil nozzle, a 15/10 swirl nozzle and a flat fan

SPECIFIC WEED CONTROL EQUIPMENT

VERMOREL 2000 PRO CONFORT

102022

For large gardens, orchards, market gardens, greenhouses etc. For intensive use (treatment, weeding)

- Reservoir capacity: 16 L with visible liquid level
- Ergonomic back frame, which perfectly fits the shape of your back
- Reversible left/right pump lever, adjustable in all positions (for width and height – by notches of 10°)
- High-performance diaphragm pump with curved piston
- Pressure relief valve, adjustable from 0 to 5 bars
- Professional 'PROFILE'-type lance handle
- Composite telescopic lance, 60 cm / 120 cm, with high mechanical and chemical resistance
- Multi-purpose adjustable nozzle holder
- Delivered with the following equipment : 1 multi-purpose, adjustable nozzle holder equipped with original swirl nozzle with 15/10 plate, a blue flat fan nozzle and a blue anvil nozzle

TREATMENT AND WEED CONTROL EQUIPMENT

VERMOREL 2000 ELECTRIC

102042

For all constant pressure knapsack sprayer operations where the user does not wish to pump manually

- Reservoir capacity: 18 L, yellow, translucent, with graduated gauge
- Ergonomic back frame, which perfectly fits the shape of your back
- Stainless steel suction filter
- High-performance 12-volt lead battery
- High-technology electric motor for intensive use
- Diaphragm pump allowing the use of solutions of both liquid and powder based agrochemicals
- Electronic battery charger with indicators for charging and battery charged
- Double-pipe hose
- Electromechanical 'PROFILE' handle
- Composite, telescopic lance (60 cm - 120 cm) with high mechanical and chemical resistance
- Multi-purpose nozzle holder with adjustable jet
- Delivered with the following equipment: 1 multi-purpose nozzle holder with adjustable jet, equipped with a swirl nozzle with 15/10 plate, a blue flat fan nozzle and a brown anvil nozzle

TREATMENT AND WEED CONTROL EQUIPMENT

Jet	Buse	Débit (L/m)	Pression (bar)	Autonomie Litres	Autonomie Réservoir
	Turbulence (15/10°)	0,83	3,6	212	12
	Pinceau bleu	1,00	2,5	300	17
	Miroir marron	1,16	1,5	435	24

VERMOREL 2000 ELECTRIC - on cart

102063

For parks and gardens

- Reservoir: capacity 18 L, yellow, translucent with graduated gauge
- Stainless steel suction filter
- High-performance 12-volt lead battery
- High-technology electric motor for intensive use
- Diaphragm pump allowing the use of solutions of both liquid and powder based agrochemicals
- Electronic battery charger with indicators for charging and battery charged
- Double-pipe hose, length 5 m
- Electromechanical 'PROFILE' handle
- Composite, telescopic lance (60 cm - 120 cm) with high mechanical and chemical resistance
- Multi-purpose nozzle holder with adjustable jet
- Delivered with 1 multi-purpose nozzle holder with adjustable jet, equipped with a swirl nozzle with 15/10 plate, a blue flat fan nozzle and a brown anvil nozzle
- Mounted on a cart with large-diameter wheels

TREATMENT AND WEED CONTROL EQUIPMENT

Jet	Buse	Débit (L/m)	Pression (bar)	Autonomie Litres	Autonomie Réservoir
	Turbulence (15/10°)	0,83	3,6	212	12
	Pinceau bleu	1,00	2,5	300	17
	Miroir marron	1,16	1,5	435	24

Article Name	Reference	EAN code	Item weight (kg)	Box N° Units	Box Dimensions W x D x H (mm)	Box Gross Weight (kg)	Pallet Dimensions W x D x H (mm)	Pallet N° layers	Pallet N° Boxes / layer
Vermorel 1800	102084	3176241020842	5,10	1	390 x 285 x 615	5,67	1200 x 800 x 1995	3	8
Vermorel 2000 Pro Comfort	102022	3176241020224	5,97	1	390 x 285 x 615	6,54	1200 x 800 x 1995	3	8
Vermorel 2000 Pro Comfort Weeding	102078	3176241020781	5,67	1	390 x 285 x 615	6,23	1200 x 800 x 1995	3	8
Vermorel 2000 Electric	102042	3176241020422	8,04	1	390 x 285 x 615	8,71	1200 x 800 x 1995	3	8
Vermorel 2000 Electric on cart	102063	3176241020637	11,12	1	390 x 285 x 615	11,72	1200 x 800 x 1995	3	8

SPRAYER NOZZLES : AN EXCLUSIVE BERTHOUD CONCEPT

+ EASIER TO CHOOSE
A single and unique nozzle holder
Different coloured nozzles depending on the output delivered

+ EASIER TO CHANGE
"One piece" nozzles

+ MORE PRACTICAL TO USE
Simple screw or unscrew the nozzles to change

Nozzle output table in litres/ minute

NB: nozzle references are given in the spare parts catalogues

HOLLOW CONE NOZZLES

Conical jets for applying insecticide or fungicide treatments

	282369	282370	282371	282372	282373	282374	282375
Pressure	Ø 8/10e	Ø 10/10e	Ø 12/10e	Ø 15/10e	Ø 18/10e	Ø 20/10e	Ø 25/10e
1 bar	0,185	0,235	0,275	0,395	0,470	0,515	0,680
2 bars	0,245	0,300	0,385	0,535	0,660	0,720	0,980
3 bars	0,300	0,360	0,470	0,660	0,795	0,870	1,155

FLAT FAN NOZZLES

Small width flat jets for localised weeding as well as specific treatments (wood treatment, roof moss control...)

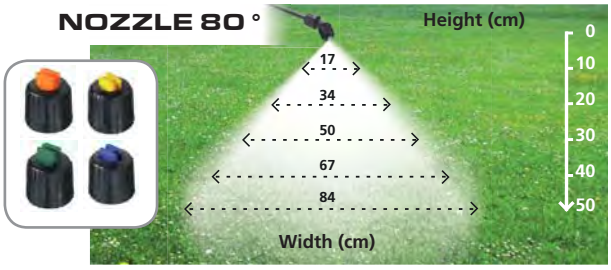
	282488	282489	282461	282458	282462
Pressure	ORANGE	GREEN	YELLOW	BLUE	RED
1 bar	0,250	0,360	0,560	0,690	1,120
2 bars	0,340	0,500	0,650	0,970	1,290
2,5 bars	0,380	0,560	0,720	1,080	1,440
3 bars	0,420	0,600	0,790	1,180	1,580
Angle	80°	80°	80°	80°	110°

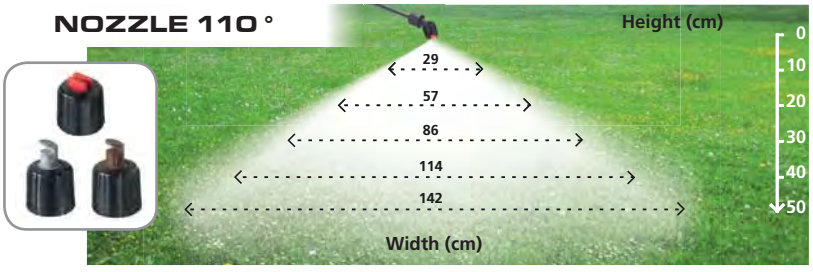
ANVIL NOZZLES

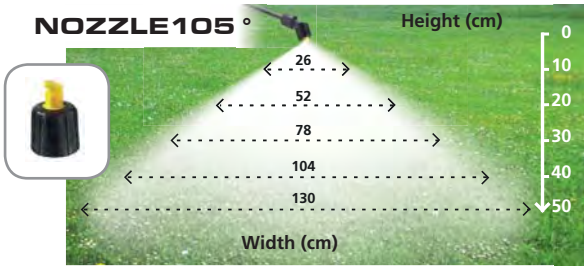
Large width flat jets for weeding large surfaces

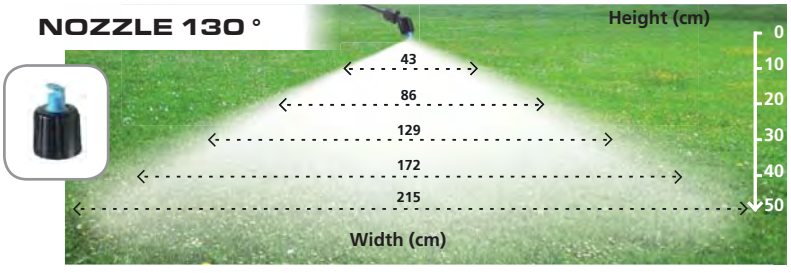
	282460	282457	282490	282491
Pressure	YELLOW	BROWN	GREY	BLUE
1 bar	0,460	1,150	1,390	2,310
1,5 bars	0,570	1,410	1,700	2,830
2 bars	0,650	1,630	1,960	3,270
2,5 bars	0,730	1,860	2,190	3,650
Angle	105°	110°	110°	135°

Nozzle to target distance









Calibration

$$\frac{\text{Flow (l/min) x 10,000}}{\text{Swath (m) x speed (m/min)}} = \text{Volume rate (l/ha)}$$

	Ref	Nozzle	Pressure (bar)	Swatch (cm)	Flow (L/min)	Volume rate (L/Ha)
	282369	8/10°	2	20	0,245	204,17
	282370	10/10°	2	25	0,300	200,00
	282371	12/10°	2	35	0,385	183,33
	282372	15/10°	2	60	0,535	148,61
	282373	18/10°	2	80	0,660	137,50
	282374	20/10°	2	80	0,780	162,50
	282375	25/10°	2	80	0,980	204,17
	282489	80°	2	84	0,500	99,21
	282488	80°	2	84	0,340	283,34
	282461	80°	2	84	0,650	128,97
	282458	80°	2	84	0,970	192,46
	282462	110°	2	143	1,290	150,35
	282460	105°	2	130	0,650	73,08
	282457	110°	2	143	1,630	164,34
	282490	110°	2	143	1,700	198,14
	282491	130°	2	215	2,830	219,38

Accessories : sprayer nozzles

HOLLOW CONE NOZZLE KIT

with 4 mist jets (10, 12, 15 and 18/10)

Ref. 200560

HERBICIDE NOZZLE KIT

with 2 flat fan and 2 anvil nozzles

Ref. 200601

"REX VARIABLE" NOZZLE

Ref. 210627

NOZZLE KIT FOR ALL TREATMENTS

with 2 mist jet nozzles (8 and 15/10), 1 flat fan and 1 anvil nozzler

Ref. 211324

BERTHOUD ALSO HAS A **COMPLETE RANGE OF ACCESSORIES** FOR BETTER TREATMENTS, GREATER EASE AND SAFETY

Colour-coded segmentation according to the 4 uses to facilitate the purchase

HIGH TREATMENTS

To treat higher and with precision, safely

EQUIPMENT

Equip your sprayer to make it versitile, from plant treatment to DIY

WEEDING

Remove weeds efficiently whilst protecting the plants nearby

MAINTENANCE AND CLEANING

To keep your equipment in good condition for as long as possible

GIANT COMPOSITE TELESCOPIC LANCES, WITH HOSE, QUICK CONNECT AND PROFILE HANDLE, 2.40 OR 3.60 M LONG

All park and garden owners know that trees need to be treated at least twice a year (sometimes 3 times in the case of fruit trees): once in winter (winter treatment) then in the spring after flowering ("fruit worm").
Most mature trees are over 4/5 m high and standard spraying equipment is not adequate for treatment above that height.
Giant telescopic lances made of BERTHOUD composite materials can be extended to 2.4 m or 3.6m. They are the perfect tools for these jobs. They are light, rigid and strong. They are also highly chemical resistant and mechanically tough.They can also be used for treating roofs (moss control), a requirement for all house owners.

GIANT COMPOSITE TELESCOPIC LANCE WITH HOSE AND QUICK RELEASE CONNECTOR:
- 2,40 m model
Code 280326
- 3,60 m model
Réf. 282447

BOX PROMO 18

JOINTS VITON® SEALS
UTILISATION INTENSIVE
HAUTE RÉSISTANCE

PROFILE GRIP MULTIPURPOSE COMPOSITE **SPRAYER LANCE**

Code 280327

PROFILE GRIP UNIVERSAL **SPRAYER LANCE**

Code 280324

STOPREX GRIP UNIVERSAL **SPRAYER LANCE**

Code 211665

TELESCOPIC SPRAY LANCES

PROFILE OR STOPREX GRIP COMPOSITE **TELESCOPIC SPRAY LANCE**

Code 280362

60 CM LANCE EXTENSIONS

PROFILE OR FUSO GRIP-COMPATIBLE 60 CM COMPOSITE **LANCE EXTENSION** **Code 280363**

PROFILE OR FUSO GRIP-COMPATIBLE 60 CM ALUMINIUM **LANCE EXTENSION** **Code 280364**

SPRAY LANCE GRIPS

"PROFILE" HANDLE
Ergonomic:
Handle / lance angle ensures a natural wrist position
Reliable: Valve closure system perpendicular to liquid flow
Easy maintenance:
spring, seals and valve unscrew easily
Compatible : with lances with STOPREX thread including "giant" telescopic composite lances 2.40 m and 3.60 m in length
Possibility to fitaccessories:
pressure gauge, pressure regulator
Code 280310

STOPREX SPRAY LANCE GRIP
Hand-operated for all sprayers
Allows continuous spraying
Code 212370

BOOMS

Booms convert a single-nozzle spray lance into a multi-nozzle lance to treat a large surface in one go

2 nozzles : sprays two rows in a single run
3 nozzles : wide-boom herbicide treatment
4 nozzles : very wide boom herbicide spraying

SPRAY BOOM WITH 2 SWIVELMOUNTED NOZZLES
Code 220516

3-NOZZLE HERBICIDE **BOOM**
Code 255044

4-NOZZLE HERBICIDE **BOOM**
Code 215071

HANDLE, LANCE TUBE AND EXTENSION COMPATIBILITY

	SPRAY LANCE GRIP			LANCE TUBES	LANCE EXTENSIONS	
REFERENCES	PROFILE	STOPREX	FUSO	280362	280363	280364
PROFILE	-	-	-	•	•	•
STOPREX	-	-	-	•	-	-
FUSO	-	-	-	-	•	•
280362	•	•	-	-	•	•
280363	•	-	•	•	•	-
280364	•	-	•	•	•	-

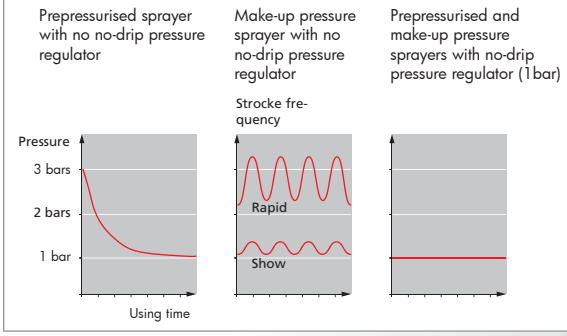
• compatible - non-compatible

NO-DRIP PRESSURE REGULATOR

PRESSURE REGULATORS CAN HELP YOU PROTECT THE ENVIRONMENT (AND SAVE YOU MONEY)

Pressure regulators:
- Ensure you always have the right pressure of 1 bar at the nozzle tip
- Can save up to 50% on chemicals
- Ensure dosage stability
- Protect the environment by preventing overspraying
- Used with prepressurised sprayers, will extend acreage covered
- Used with pressure sprayers, will reduce the number of pump strokes required
- Can be used with all commercially available professional nozzle tips
- Integrated anti-dip system

WORKING PRESSURE FLUCTUATIONS CAUSE HAPHAZARD DOSAGE



Ref 200806

EQUIPMENT SPRAYERS

Accessories to create the best spraying conditions.

HERBICIDE SPRAY SHIELD

Large-model spray shield for safe, effective spot application of herbicides
To be use the flat flan nozzle

Ref. 455004

HOSE LENGHT 180 CM

ELYTE 8 DIY
with quick release connector

Ref. 280380

FLEXIBLE EXTENSION TUBE

For reaching places that are difficult to access
Ideal for applications such DIY and gardening

Ref. 211507

Upgrade your older generation sprayers with the following "QUICK release"adaptor kits

QUICK RELEASE ADAPTOR KIT

FLORALY F5/F7/F13
OLD VERSION Among other things, this kit enables easy use of giant 2.40 m and 3.60 m telescopic lances which are also equipped with quick release hoses (female)

Ref. 251713

TIP N°5

"For spot weed killing, use a shield and do not spray when it is windy. This prevents splashing and stops the weed killer drifting onto other plants."

SPRAYER MAINTENANCE PRODUCTS

Good sprayer maintenance will prolong the sprayer's original level of performance for many years.

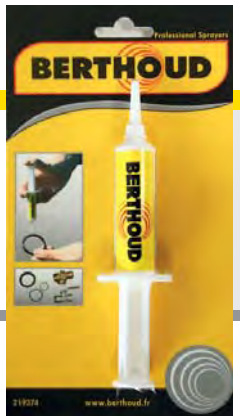
- **SYRINGE OF SILICONE GREASE**

At least once or twice a year, or more if the sprayer is used intensively, it is necessary to grease all the seals (notably those on the pump which are in contact with the liquid) with quality silicone grease.
The application of a small quantity is made easy thanks to the syringe-shaped container.

SILICONE GREASE SYRINGUE

(10 g)

Réf. 219374



TIP N°6

"To keep the sprayer in good condition for longer, remember to clean and rinse it after each use."

SPARE ACCESSORIES

PUMP

ELYTE DIY
ALL VERSION

Ref. 200370

REPLACEMENT PARTS

VERMOREL
ALL VERSION

Ref. 212310

REPLACEMENT PARTS

COSMOS
ALL VERSION

Ref. 218343

PUMP SEALS

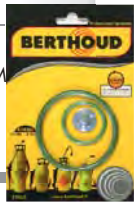
ELYTE DIY
ALL VERSION

Ref. 219803

PUMP SEALS

F5, F7 AND F13
PLASTIC PUMP STEM

Ref. 219535



PUMP SEALS

F5, F7 AND F13
ALUMINIUM
PUMPS STEM

Ref. 255050

PUMP SEALS

F5, F7 AND F12
FLORALY OPTIMA
DIY

Ref. 282872

PULVEXEL 50

50 L - 2-stroke engines	102501
50 L - 4-stroke engines	102502

The indispensable sprayer for **PARK AND GARDEN MAINTENANCE**

Light manoeuvrable and compact, the PULVEXEL 50 is the idealmotorised sprayer for gardens and parks where treatment of high up places such as trees or of large surface areas (with the 4 nozzle, 2 metre boom) is required.

PERFORMANCE
- Oversized engine and pump for high flow rates and pressures

ADJUSTABLE
- Regulator-adjustable flow rates and delivery pressures

PRACTICAL
- Large-diameter filler opening
- Special drain design prevents residual liquid
- Graduated, clear plastic tank
- Hose cradle
- Spray pressure gauge with pressure controller
- Removable pump handle

STABLE
- 2 standard gauge pneumatic tires

RELIABLE
- High-quality engines
- Chemical-resistant pump
- Agitator returns liquid to tank for mixing
- Supply and delivery filters

RUGGED
- Reinforced steel frame and corrosion-resistant finish
- Polyethylene tank

STANDARD EQUIPMENT
- 10 m spray hose
- 60 cm spray lance with adjustable nozzle
- Professional, ceramic nozzle (15/10 disc nozzle)
- Simple, easy-to-use hose cradle and lance clamp

In the 'towed' version with a weed control boom behind self-supporting mower or small tractor with 2-metre, 4-jet weed control boom, via drawbar

In the "manual" version with reel (optional), hose and high-pressure lance

CHOOSE YOUR ENGINE

• 2-STROKE ENGINE
Power :1.8 HP
OLEOMAC engine
PUMP
MC 20/20 COMET
Flow rate range : 0-20 l/min
Pressure range : 0-20 bar

• 4-STROKE ENGINE
Make: HONDA
Ref.: GX 100
Type: 4 stroke single cylinder
Overhead valves
Power: 3 HP
Rotation speed: 3600 rpm
Conforms to new anti-pollution standards
PUMP
MC 25/20 COMET
Flow rate range : 0-20 l/min
Pressure range : 0-25 bar

	Article name	Pulvexel 50L 2T	Pulvexel 50L 4T
	Reference	102501	102502
	Ean code	3176241025014	3176241025021
Box	N° units	1	1
Box	Weight (kg)	47,5	44
Pallet	Dimensions W x D x H (mm)	1200 x 800 x 2130	1200 x 800 x 1770
Pallet	N° layers	2	2
Pallet	N° box / layers	1	1

PULVEXEL 120

120 L - 4-stroke engine **102503**

Special **LARGE-AREA MODEL**

A dual-mode sprayer for both manual operation using the highpressure hose and lance or hitched to a ride-on lawnmower or garden tractor, the PULVEXEL 120 is the engine-powered sprayer maintenance professionals and groundsmen need for a variety of routine jobs such as treating trees which are difficult to access or spraying large areas (much easier and faster with the 3 m spray boom). The Pulvexel 120 is manufactured to the legendary highstandards of BERTHOUD.

GARANTIE 1 AN BERTHOUD 1 an year GUARANTEE 1 YEAR

PERFORMANCE
- Oversized engine and pump for high flow rates and pressures

ADJUSTABLE
- Regulator-adjustable flow rates and delivery pressures
- Height-adjustable drawbar
- Two-section, individually controlled articulated, height-adjustable spray boom
- Adjustable support

PRACTICAL
- Large-diameter fill opening
- Special drain design prevents residual liquid
- Graduated, clear plastic tank
- Adjustable hose cradle
- Spray pressure gauge with pressure controller
- Removable pump handle
- Adjustable stilts

STABLE
- 2 standard gauge pneumatic tyres

RELIABLE
- High-quality engines
- Chemical resistant pump
- Agitator returns liquid to tank for mixing
- Inlet and outlet filters

RUGGED
- Reinforced steel frame and corrosion-resistant finish
- Polyethylene tank

STANDARD EQUIPMENT
- 10 m spray hose
- 60 cm spray lance with adjustable nozzle
- Professional, ceramic nozzle (15/10 disc nozzle)
- Simple, easy-to-use hose cradle and lance clamp

In the 'towed' version with aweed control boom behind self supporting mower or small tractor with 3-metre, 6-jetweed control boom, via drawbar

In the 'manual' version with reel (optional), hose and high-pressure lance

ENGINE AND PUMP

• **4-STROKE ENGINE**
Make: HONDA Ref.: GX 100
Type: 4 stroke single cylinder
Overhead valves.
Power: 3 hp
Rotation speed: 3600 rpm
Conforms to new anti-pollution standards
PUMP
MC 25/20 COMET.
Flow rate range : 0-20 l/min
Pressure range : 0-25 bar

	Article name	Pulvexel 120L 4T
	Reference	102503
	Ean code	3176241025038
Box	**N° units**	1
Box	**Weight (kg)**	62
Pallet	**Dimensions W x D x H (mm)**	1200 x 800 x 1770
Pallet	**N° layers**	2
Pallet	**N° box / layers**	1

PULVEXEL electric

50 L - Motor 230 V	102510	50 L - Motor 400 V	102511
120 L - Motor 230 V	102512	120 L - Motor 400V	102513

POWER WITHOUT POLLUTION

Easy to handle and space-saving, the PULVEXEL «electric» range uses mains power (230 or 400 Volts) and gives you professional performance in both flow rate and pressure. Fitted with a special electric motor and a pump made to professional specifications, these sprayers are the idea answer for all professionals (horticulturists, market gardeners, greenhouse operators, etc.) who have to spray in closed areas such as: greenhouses or breeding houses (to apply non-corrosive products, etc.). They are also useful in any circumstances where users do not want the nuisance of petrol engines.

CHOICE OF MOTORIZATION

- **TYPE: 230 VOLTS SINGLE PHASE**
  Power: 1.25 HP
  Speed (rev./min): 2800
  Power cable: 1.5 m with plug
  PUMP
  Brand: COMET
  Type: MC 20/20
  Flow rate: 1 to 23 l/min

- **TYPE: 400 VOLTS THREE PHASE**
  Power: 1.25 HP
  Speed (rev./min.): 2800
  Power cable:1.5 m without plug
  PUMP
  Brand: COMET
  Type: MC 20/20
  Flow rate: 1 to 23 l/min

STABLE
- Chassis mounted on 2 wheels with inflatable tyres

RELIABLE
- High quality motorization
- Pump compatible with most agrochemicals
- Hydraulic mixing by returning to the tank
- Filling and suction filters

STRONG
- Reinforced steel chassis protected by ultra resistant paint
- Polyethylene tank

STANDARD EQUIPMENT
- 10 m hose
- High pressure nozzle with adjustable jet (60 cm)
- Professional ceramic jet (1.5/10th pellet)
- Simple device for winding the hose and fixing the nozzle to the chassis

PERFORMANCE
- Motor and pump are powerful enough to obtain excellent performances (flow rate, pressure)

PRACTICAL
- Large diameter filler hole and sump for complete emptying
- Translucid tank with filler indication
- Hose holder and optional winder
- Pressure gauge for measuring and adjusting service pressure

CONFIGURATION
- Usable in «manual» version with high pressure hose and nozzle.
- Can attach a drawbar for use in any kind of terrain as needed

			Box		Pallet		
Article Name	Reference	EAN code	N° Units	Gross Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
Pulvexel 50L 230V	102510	3176241025106	1	45,5	1200 x 800 x 2130	2	1
Pulvexel 120L 230V	102512	3176241025120	1	60,5	1200 x 800 x 2130	2	1
Pulvexel 50L 400V	102511	3176241025113	1	43	1200 x 800 x 2130	2	1
Pulvexel 120L 400V	102513	3176241025137	1	52,5	1200 x 800 x 2130	2	1

PULVEXEL 50 electric

50 L - 12 V battery **102514**

The utility trailed sprayer, PRACTICAL, ECONOMICAL AND ENVIRONMENTALLY FRIENDLY

For anyone with a ride-on mower or micro-tractor, in charge of the upkeep of parks and gardens, the battery powered (off-vehicle) PULVEXEL 50 12 V sprayer is the essential add-on. The PULVEXEL 50 12V sprayer can be pulled along for use with either the 2-nozzle weed control boom or the mono-jet lance, for extensive or localised weed control. The 2-jet boom can be raised to make transport and storage easier. Fitted with a 12-volt electric pump, it uses the power source provided by the ride-on mower or micro-tractor, and is environmentally friendly with no exhaust emission.

GARANTIE 1 AN BERTHOUD 1 an year GUARANTEE 1 YEAR

PERFORMANTE
- Polyethylene tank – capacity 50 litres
- Max. flow rate: 4.2 bars
- Max vaccum
- Capacity: 6 l/min
- Width of treatment boom: 1.8 m

ADJUSTABLE
- Pressure can be adjusted by altering the liquid return flow

STABLE
- Frame rests on 2 inflatable wheels
- Standard wheel spacing

RELIABLE
- Filling and outlet filters
- Pump compatible with garden chemicals
- Hydraulic agitation (by liquid return)

STURDY
- Frame in reinforced steel with protective coat of ultra-resistant paint
- Polyethylene reservoir

STAND ALONE
- 12-volt electric motor powered by the battery of the ride-on
- Pump protected by safety pressure-stat
- 2.5 m power cable
- On/off switch

HOW TO USE
- Drawn (or pulled along) behind a ride-on lawnmower or micro-tractor using a drawbar; 2-jet weed control boom or localised treatment using hose and lance

STANDARD EQUIPMENT
- 5 metres of hose with simple hose-rolling mechanism
- On/off control grip
- 60 cm aluminium lance
- Universal nozzle holder with anvil nozzle
- 2 arm weed control boom with 2 jets giving treatment width of 1.82 m
- 105° anvil nozzle (yellow) with anti-drip system
- Drawbar

PRACTICAL
- Large diameter filling hole and sump for complete draining
- Manometer (containing glycerine) for easy reading of operating pressure
- Mirror nozzles with anti-drip system
- 2-outlet distributor (lance and boom)

	Article name	Pulvexel 50L 12V
	Reference	102514
	Ean code	3176241025144
Box	**N° units**	1
Box	**Weight (kg)**	29
Pallet	**Dimensions W x D x H (mm)**	1200 x 800 x 1570
Pallet	**N° layers**	2
Pallet	**N° box / layers**	1

PULVEXEL ATV

70 L - Pump 12 V **102160**

MOBILE TANK for Quad

The PULVEXEL ATV can be fitted to all quads on the market so that the vehicle can be used as working equipment. The tank is designed so that the low centre of gravity does not unbalance the quad : the quality of spraying is ideal whether on sloping or flat ground.
Everything has been designed to simplify use: the pump unit is easily accessible, hand wash, retaining strap for quick assembly and removal, multi-directional spray bar (optional).
The PULVEXEL ATV is a new feature of the PULVEXEL range designed for use by all park and garden maintenance businesses, local authorities and viticulturists.

EASY TO USE
- The Pulvexel ATV is designed to follow the shape of the quad distributing the load evenly for improved stability
- The controls are near the driver

PERFORMANCE
- Maximum operating pressure 3.5 bar
- Maximum flow 6.15 l/min REEL
- Robust (reel moulded on the tank)
- The hose can be fully wound to prevent it being crushed by the quad
- Maximum hose lifetime (not pinched while stored)

TANKS
- Sprayer mounted on the quad with 70 litre tank and 12 litre hand wash
- Hose can be removed from the tank so that the tank is easier to drain

PUMP
- 12V pump running off the quad battery
- Can supply either a lance and a bar or both simultaneously via a 2 way valve
- Excess liquid is returned to the tank
- Glycerine filled pressure gauge

STANDARD FEATURES
- Telescopic lance 0.60m to 1.20m
- Viton® moulded handle
- 5m hose
- Swirl nozzle

OPTIONS
- 1m bar with 3 nozzles
- Metal valve
- Pump rating (standard: 6.15L/min/3.5 bars option : 7L/min/6.9 bars)

GARANTIE 1 AN BERTHOUD 1 an year GUARANTEE 1 YEAR

			Box		Pallet		
Article Name	Reference	EAN code	N° Units	Gross Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
Pulvexel ATV	102160	3176241021603	1	24	1200 x 800 x 1830	2	1

BOOSTAIR®

16 L - Mist blower **102515**

ESSENTIAL for all intensive treatment at HEIGHTS or over LARGE surface areas.

The mistblower is the essential tool for all professionals who wish to carry out with maximum efficiency :
- Plant protection treatment for a variety of crops (market garden crops, orchards, forests, vineyards)
- All sorts of plantations (citrus fruits, bananas, pineapples, cocoa, coffee, tea, cotton)
- The disinfection of buildings (stables, cowsheds, storage areas etc.), boats, containers, railway trucks etc

RESERVOIR
- Translucent reservoir (plant protection products) with graduated gauge, capacity 16 L
- Large diameter filling hole: 160 mm with filter
- Robust side handles for easy handling

COMFORTABLE BACK SUPPORT
- Translucent reservoir (plant protection products) with graduated gauge, capacity 16 L
- Large diameter filling hole:160 mm with filter
- Robust side handles for easy handling

MAIN TECHNICAL CHARACTERISTICS
- Two-stroke single cylinder motor
- Capacity: 80 cc - Power: 5 horsepower
- Maximum rotation speed (rpm): 6,900
- Capacity of liquid products reservoir: 16 L
- Capacity of fuel reservoir: 4.2 L
- Fuel: unleaded petrol + 4% oil
- Ergonomic control handle including all functions (stop/start, accelerator)
- Sound level at 15 m: 68 dB

PERFORMANCE
- Maximum horizontal range (liquids): 15 m
- Maximum air speed: 130 mps
- Maximum air volume: 1,044 m3 per hour

STANDARD EQUIPMENT
- Delivered with technical manual, spark-plug wrench and screwdriver

OPTIONAL ACCESSORIES
- Protective goggles, ear defenders, powder kit

GARANTIE 1 AN BERTHOUD 1 an year GUARANTEE 1 YEAR

LANCE TUBE
- Adjustable-length lance tube
- Adaptable extensions and elbous
- Outlet curved to 90° for easier handling and storage

SPRAY NOZZLE
- Spray nozzle (for liquid products) with 6-position adjuster system for 6 different out put values

			Box		Pallet		
Article Name	Reference	EAN code	N° Units	Gross Weight (kg)	Dimensions W x D x H (mm)	N° layers	N° Boxes / layer
Atomiseur Boostair	102515	3176241025151	1	14,14	1200 x 800 x 2340	2	5

	Ref.	Gencode	Description	PULVEXEL 50 2	PULVEXEL 50 4	PULVEXEL 120	PULVEXEL 50 2	PULVEXEL 120	GPE DESINFEC	PULVEXEL 50 1	PULVEXEL ATV	BOOSTAIR
	282619	3176242826191	Ear defenders	Strongly recommended for all types of treatment								
	282620	3176242826207	Goggles									
	251700	317624517006	Drawbar	●	●	●	●	●	●	●	●	●
	202084	3176242020841	55 cm drawbar with pin for Pulvexel 120	●	●	●	●	●	●	●	●	●
	202021	3176242020216	Short high pressure lance (30 cm) (with pipe)	●	●	●	●	●	●	●	●	●
	202095	3176242020957	High pressure lance (60 cm) (with pipe)	●	●	●	●	●	●	●	●	●
	202022	3176242020223	Long high pressure lance (1 m) (with pipe)	●	●	●	●	●	●	●	●	●
	779609	3176247796093	Lainox lance (60 cm) (with pipe) supplied with 3 interchangeable nozzles	●	●	●	●	●	●	●	●	●
	202023	3176242020230	Hose reel (capacity 50 m)	●	●	●	●	●	●	●	●	●
	202026	3176242020261	50 m hose	●	●	●	●	●	●	●	●	●
	251704	3176242517044	2 m weed killing bar, long, 4 nozzles	●	●	●	●	●	●	●	●	●
	202027	3176242020278	3 m weed killing bar (6 nozzles)	●	●	●	●	●	●	●	●	●
	455004	3176244550049	Weed killer spray shield (large)	●	●	●	●	●	●	●	●	●
	202028	3176242020285	Weed killer kit for mounting weed killer spray shield on the high pressure lance	●	●	●	●	●	●	●	●	●
	221044	3176242210440	American lance (60 cm)	●	●	●	●	●	●	●	●	●
	282617	3176242826177	BOOSTAIR atomiser powder kit	●	●	●	●	●	●	●	●	●
	102161	3176241021610	3 nozzle ramp	●	●	●	●	●	●	●	●	●

Compatible ●

Non compatible ●

A COMPLETE RANGE OF SPRAYERS FOR 'HYGIENE, LIVESTOCK AND DAIRY FARMING'

With around 100,000 dairy cattle farmers, 15,000 pig farmers, other farmers of rabbits, goats and horses, France is said to be the "world's biggest farm". The need to vaccinate and treat the animals, together with the cleaning and disinfection requirements for the farm buildings constitute a huge potential market. For this reason, BERTHOUD has developed a specific range of sprayers that are perfectly adapted to these requirements.

TEAT HYGIENE

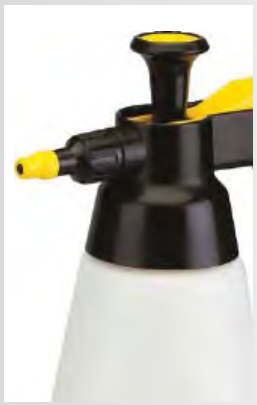
At the time of milking, twice a day, it is necessary to clean and protect the teats :

- Before milking, it is necessary to clean and disinfect the teats by spraying on a specific liquid disinfectant.
- After milking, it is necessary to soak the teats in a skin-protecting product. This product, after it has dried, gives a sort of protective film from bacteria and external sources of contamination. These two operations are easy and safe to carry out with the BERTHOUD equipment : trigger sprayers with specific 60° inclined nozzles (MAM SPRAY or TECNOMITE type), and dipping cup.

VACCINATION AND TREAMENT OF ANIMALS

All farmers have to vaccinate and/or treat the animals (chicks, cattle, goats etc.) : the BERTHOUD brand has developed a range of specific equipment that is perfectly adapted to carrying out these types of treatment easily and safely.

- For vaccinations, the equipment proposed produces a fine and homogenous atomization so that the particles can penetrate either through the eyes or through the respiratory system (product C5/1L).
- For treatment, the sprayer is equipped with pressure regulator or control systems so that the user can adhere precisely to the dosage recommendations for veterinary products (product 'MIST BLOWER 13').

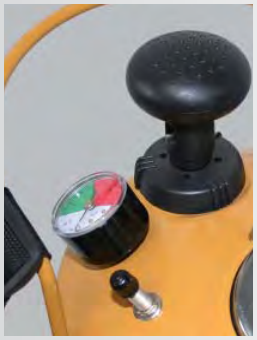


SMALL-SCALE CLEANING AND DISINFECTING

Apart from farm buildings, it is also necessary to regularly clean and disinfect the equip ment in the buildings such as the milking equipment. For these occasional and very localized requirements, BERTHOUD also offers a range of various types of small sprayers (trigger sprayers, hand operated compression sprayers and syringes) which are easy to use.

CLEANING AND DISINFECTION OF FARM BUILDINGS

The range available is sufficiently large to allow all farmers to find the most appropriate product for their requirements (C5/1L, ELYTE 8 stainless steel lance, VERMOREL 2000 Multifonction, Disinfection Unit 120).



OTHER SPRAYERS FOR PROFESSIONAL USE

BERTHOUD range also includes professional compression sprayers equipped with a pressed steel tank. Very robust (thanks to their single weld and an internal and external coating of epoxy resin) they have novel features :

- Operating pressure of up to 6 bars : very autonomous, good spraying quality
- Off-centre fixed pump and separate filling-hole : no need to remove the pump for filling and emptying the tank
- Compressor pressurizing valve : no need to pump
- Empties fully : no retention area when emptying
- Pressure gauge allowing the control of the operating pressure

MAM'SPRAY TRIGGER SPRAYER
101048

Teat hygiene

- 'XL' type sprayer head in polypropylene
- 'Hand' trigger
- Polycarbonate nozzle for spraying upwards (60° angle)
- Translucent injected polypropylene cylindrical reservoir and fully-opening top
- Total capacity: 500 ml

TECNOMITE TRIGGER SPRAYER
101046

Teat hygiene

- 'XL' type sprayer head in polypropylene
- 'Hand' trigger
- Polycarbonate nozzle for spraying upwards (60° angle)
- Translucent blown polyethylene cylindrical reservoir with filling cap
- Total capacity 1 L
- Graduation units: 250 ml

SOAKING CUP
101015

Teat hygiene

- Translucent polyethylene reservoir (400 ml)
- Large opening (40 mm) allowing easy filling
- Large watertight plastic cap
- Translucent dipping cup: diameter 35 mm, depth 65 mm
- Non-return system: the contaminated liquid cannot go back into the reservoir

HYGIENE TRIGGER SPRAYER
101027

Applications of foaming products

- Blown polyethylene reservoir, capacity 0.75 L
- Cylindrical, conic shape
- Graduated gauge
- VELA type sprayer head
- Specific nozzle for the application of the following foaming products:
  - detergents (alkaline products PH over 10)
  - disinfectant cleaning products
  - degreasing agents (products with low alkalinity e.g. shampoos etc.)
  - certain household products (win dow cleaning products, oven-cleaning products, sanitary products)
  - Various industrial cleaners

F2 HYGIENE
101134

Application of neutral products, alkaline products and disinfectants

- Small hand compression sprayer
- Injected reservoir with maximum filling mark
- Ergonomic handle with ON/OFF switch
- Resistant manually pressurized pump (polypropylene) with integrated safety valve
- Optional accessories: 30 cm extension, foam nozzle, spare seals

Article Name	Reference	EAN code	Dimensions W x D x H (mm)	Dimensions W x D x H (mm)	N° Units	Weight (kg)
Mam'spray trigger sprayer	101048	3414431010489	120x120x220	597 x 395 x 280	12	0,152
Tecnomite trigger sprayer	101046	3414431010465	132x132x230	650x450x170	12	0,150
Soaking cup	101015	3414431010151	130x80x200	600x500x400	20	0,089
Hygiene trigger sprayer	101027	3176241010270	100x100x210	600x400x400	1	0,051
F2 HYGIENE	101134	3176241011345	395x293x295	400x300x295	6	0,510

C5/1 L

101104 / 101107

Vaccination of poultry — Treatment of mange (pigs etc.) — Insecticide treatment — Application of disinfectants

- Low volume' application technique
- Constant and homogenous atomization
- Electric sprayer head
- Powered by 5 x 1.5 V R 20 type batteries
- Rotation speed of disc off-load: 6,000 rpm
- Autonomy: around 8 hours
- High-density polyethylene reservoir 1L
- Knapsack 5L reservoir resistant to chemical products (UV absorber)
- Different outputs possible due to interchangeable nozzles
- Large diameter filling hole with filter
- Sealed screw cap with air valve
- Accessories supplied: 4 nozzles and 1 graduated dosage cup

Model	Measuring cup	Reservoir 5L	Nozzles					
			Violet	Blue	Yellow	Green	Rouge	Black
Ref 101107 C5 1L	x		x	x	x	x		
Ref 101104 C5 1L + reservoir 5L		x				x	x	x
Ref 101108 reservoir		x						

Characteristics:	C5		
Number of batteries	5 types batteries 1,5 V		
Autonomy	Around 8 hours		
Reservoir capacity	1 liter		
Nozzles		Output/hectare at a speed of 3.6 km/h for a width of	
Colours	Reference	Output ml/min	0,80 m (minimum)	4,80 m (maximum)
Violet	300230	25	5,2 L/Ha	0,9 L/Ha
Blue	300231	45	9,3 L/Ha	1,5 L/Ha
Yellow	300232	85	17,7 L/Ha	2,9 L/Ha
Rouge	300233	100	20,8 L/Ha	3,4 L/Ha
Green	300234	150	31,2 L/Ha	5,2 L/Ha
Black	300235	200	41,6 L/Ha	6,9 L/Ha

MIST BLOWER

102113

Vaccination, insecticide treatment for livestock and dairy farms and grain silos

- Cylindrical pressed steel reservoir with internal and external epoxy resin protection
- Total capacity: 13 L, effective capacity: 10 L
- Double strap for carrying on your back
- Resistant, off-centre fixed pump (reinforced fibreglass polypropylene body) with brass rod and Viton® seals
- Safety valve calibrated to 6 bars
- Pressure gauge
- Compressor pressure valve
- Pressure regulator calibrated to 2 bars (good level of operating autonomy)
- Telescopic composite lance tube, length 70 – 120 cm
- Delivered with SAPHIREX nozzles, diameters 6/10e and 15 /10e

Article Name	Reference	EAN code	Dimensions W x D x H (mm)	Dimensions W x D x H (mm)	N° Units	Weight (kg)
C5 / 1 L	101107	3414431011073	1000x200x150	1080x210x160	1	1,066
Reservoir 5L	101108	3414431011080	390x290x190	400x300x200	1	0,880
C5/1L + reservoir 5L	101104	3176241011048	-	1140x280x340	6	1,900
Mist blower 13 Hygiene	102105	3176241021054	245x215x550	250x250x845	46	6,013

C5/1 L

101107

See characteristics p. 37

ELYTE 8 STAINLESS STELL LANCE

102106

Application of chlorinated disinfectants (bleach, certain acids)

- Translucent yellow injected polypropylene reservoir with graduated gauge, effective capacity: 5 L
- Stainless steel pump rod and valve with EPDM seals
- Flexible reinforced hose
- Professional PROFILE lance handle with EPDM

seals and stainless steel needle valve

- Stainless steel lance tube, length 60 cm
- Stainless steel nozzle with adjustable jet

Carrying and holding handle

Fixed and off-centre pressurizing pump. Stainless steel rod

Large upper hole for easy filling and emptying

VERMOREL 2000 HYGIENE

102099

Disinfection, vaccination and insecticide treatment of livestock and dairy farms and grain silos

- Pump lever that is adjustable in all positions (left/right, width, height, automatic return in high position)
- Integrated adjustable pressure relief valve 0 - 5 bars
- High-resistance special surface treated diaphragm and valves
- Translucent reservoir with graduated gauge, capacity 16 L
- Composite lance tube (length 60 cm) with high mechanical and chemical resistance
- Professional PROFILE type lance handle with UHR seals
- High-resistance reinforced hose
- Low pumping speed

Ergonomic back-frame (fits the shape of your back perfectly)

Article Name	Reference	EAN code	Dimensions W x D x H (mm)	Dimensions W x D x H (mm)	N° Units	Weight (kg)
ELYTE 8 stainless stell lance HYGIENE	102106	3176241021061	230x177x650	249x199x690	1	2,170
VERMOREL 2000 MF HYGIENE	102099	3176241020996	390x290x610	380x290x605	1	5,748

DISINFECTION UNIT 120

102107

Disinfection of farm buildings

- No emissions of toxic gases (mains supply electric motor 220 V)
- Very autonomous:
  - Large capacity reservoir (120 L)
  - Long hose (25 m)
  - Treatment at heights (6 - 7 m due to giant telescopic lance, 2.4 m)
- Dosage control (adjustable pressure pump with pressure gauge)
- Economy of product: NOZAL flat jet professional nozzle (sintered alumina) allowing the treatment of 10 m2 in 1 minute
- Easily transportable: unit on chassis with handles
- Inflatable wheels with plastic rims
- Resistant to aggressive chemical products:
  - Viton® diaphragm piston pump with stainless steel seat and valves
  - Galvanized steel chassis
  - Reinforced PVC hose
  - Stainless steel pressure gauge (glycerine filled)
  - Alumina NOZAL nozzle

OTHER SPRAYERS FOR PROFESSIONAL USE

MASTER 9

102109

EFFECTIVE CAPACITY: 6 L

MASTER 13

102113

EFFECTIVE CAPACITY : 10 L

- Pressed steel reservoir with a single weld + internal and external epoxy resin protection
- Total emptying as no retention on emptying
- Large filling hole on the top of the reservoir separate from the valve
- Fixed and off-centre pressurizing pump (fibreglass pump body)
- Multi-purpose side handle which also serves as a protecting arch for the accessories on the top of the apparatus
- Safety valve with VITON® seals calibrated to 6 bars
- Pressure gauge with green zone (recommended pressure level) and red zone (prohibited pressure level)
- Compressor pressurizing valve
- For the application of concrete form oils, impermeable façade coatings, chemicals for treating wood and roof timbers, solvent strippers, detarring solvents, etc

Article Name	Reference	EAN code	Dimensions W x D x H (mm)	Dimensions W x D x H (mm)	N° Units	Weight (kg)
MASTER 9 METAL HYGIENE	102109	3176241021092	260x260x260	250x250x845	2	5,830
MASTER 13 METAL HYGIENE	102113	3176241021139	250x250x850	250x250x845	1	5,909

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